

"THE CHALLENGE OF SOVIET INDUSTRIAL GROWTH"  
by

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before  
THE PRINCETON CONFERENCE  
PRINCETON UNIVERSITY  
at 8:30 p. m., EST  
12 December 1956  
Princeton, New Jersey

It is a pleasure to return to Princeton to take part in your  
discussions on the "Challenge of Soviet Industrial Growth".

During the past two days a group of outstanding experts, meeting  
here, have been thoroughly canvassing this subject. I shall endeavor not  
to retread the ground they have been over.

MORI/CDF

A sober understanding of the facts of life about the Soviet Union is fundamental to any appreciation of the security position of the United States. It has always been a source of great comfort to us in Washington to know that so many throughout the country, of which this Princeton Conference is evidence, are also working on this problem. We, in Washington, are being ably assisted by scholars, educators and directors of research foundations; by leaders of business and representatives of labor, and others working individually and in groups, to help toward a better appreciation of the true nature of the Soviet challenge.

Tonight, I shall sum up briefly the character and dimensions of the Soviet industrial system as it has been built up, and particularly as the leaders of the Soviet themselves view it; and then move on to the external manifestations of the Soviet industrial power, particularly the impact it has had on less industrialized nations in various parts of the world. Here, the Soviet economic shortcuts to industrial strength are glamorously attractive but correspondingly politically dangerous, since few in these countries have had first-hand experience with the toll paid by people who come under Communist influence.

Then, I propose we have a look at the Soviet challenge in its impact on our security interests, particularly in areas where Soviet ambitions most directly conflict with the policy of the United States and the Free World in building a base of peace and stability.

And finally, I shall deal with the danger which Soviet industrial and scientific progress represents for the system of government of the Soviet Union itself, and the reflection of this problem in the troubles which the Soviet leaders are encountering in Eastern Europe.

A measure of industrialization today is viewed as a necessary adjunct for any state that aspires to be a power in the world. Obviously in the atomic age, no state can develop real military strength unless it has a substantial industrial base. But even those countries that have no such aspirations do nevertheless feel that they will continue to be labelled as backward and undeveloped unless they industrialize. Almost everyone must have a steel mill these days.

Hence, we see some states attempting, possibly too abruptly for their own good, to achieve a degree of industrialization which wiser counsels might have told them should have been sought more modestly and with more regard for the proper balance between heavy industry, light industry, and agriculture.

The spectacular industrial advances made by the Soviet Union, particularly over the past decade, and the powerful position it has assumed in the world, in part as a result of its industrial growth, have had a great influence on the thinking of the non-industrialized countries of the world which comprise approximately three-quarters of the states now members of the United Nations.

A great industrial machine may be put to good or evil ends. It is not always a good in itself. The industrialization in Germany both in the early part of the century and in the period between the two wars, keyed as they were to a military machine, tended to build ambitions and to create pressures which led to world conflict. The present trend in the Soviet Union, with its emphasis on heavy industry and the building of a vast military establishment, has forced upon the United States and many other free countries, grim expenditures for armament.

The Free World, however, cannot be expected to ignore the possible consequences of the far-flung economic and industrial strength that has been developed in the Soviet Union and has made it, in a short space of time, the second most powerful nation in the world.

If the leaders of the Soviet Union can be said to have any guiding philosophy, I suppose it is their deep respect for power -- political and military power. They have always been obsessed with the brute fact of strength. You remember that Stalin, at one of the World War II conferences with Churchill and Roosevelt, contemptuously dismissed the influence of the spiritual leader of the millions of Catholics in the world with the rhetorical question: "The Pope -- how many divisions does he have?" Bulganin and Khrushchev can be just as cavalier in dealing with peoples with little military might. There could hardly be a better case in point than the brutal attempt to crush the Hungarian revolutionaries.

The leaders of the Soviet Union know full well that military power and political power, which they also cherish, rest on a foundation of industrial power. Soviet devotion to the rapid growth of heavy industry is one of the most unhappy love affairs of the 20th Century. They subordinated the personal welfare of a whole generation of Soviet people to forced-draft production of steel, oil, and machinery.

If any capitalistic country in the world had set its priorities so heavily in favor of steel and so markedly against humanity, that country would be thoroughly castigated, and rightly so. In contrast, the Soviet Union is proud of its success in grinding the makings of a great modern industrial system out of the flesh of its people.

The price the USSR has paid for its rapid industrialization must not blind us to the physical accomplishments of the Soviet Union in this field. At the 20th Party Congress of the Communist Party of the Soviet Union in Moscow last February, a full-dress presentation of Soviet policy was given, and on many occasions since, Soviet leaders have described their industrial achievements and their program for the future. They have literally issued a challenge to the United States to compete with the USSR economically, and -- through the world-wide use of their economic power for international political influence. This is a grave challenge.

Soviet leaders believe they have grounds for the high self-confidence they have been showing.

Today the gross national production of the USSR is slightly more than one-third that of the U.S.; it is about three-quarters again as large as that of the United Kingdom which ranks third. We still have a very great lead, but the Soviet rate of progress is rapid. Moreover, in the Soviet Union, capital goods and basic industrial materials form a much greater share of overall production than in the United States. Thus, while their gross national production is only one-third of ours, their production of capital equipment is about 45% of ours. Soviet production of machine tools actually exceeds that of the United States.

The resources for investment in heavy industry are made available by a deliberate policy of withholding economic benefits from the Soviet consumer. Thus, Soviet production of passenger automobiles is between 1% and 2% of our own. The United States produces 50 washing machines for every one produced in the USSR, and 5 radio and TV sets for each one they produce for a population almost one-quarter larger than ours.

As I have indicated, the Soviet industrial base is still only a fraction of our own. It is nevertheless large enough to permit the Soviet leaders to expand their military capability impressively, to plan an increasingly active economic role in undeveloped areas, and to speak confidently at the 20th Party Congress of closing the gap between their output and ours.

The Soviet leaders point boastfully to the fact that the value of Soviet total economic output has increased almost threefold from 1928 to date and this despite a devastating war which set them back severely during the period

1941-45. The rate of their industrial growth during this period has been about twice as high as the rate of their over-all growth. This has been possible because important parts of their economy have been permitted to lag behind, particularly agriculture and consumer goods.

One key factor in achieving this rapid rate of industrial growth is Soviet investment policy, which of course is set by the Soviet Government not in accord with demand but according to what the traffic will bear. A large part of the total national production of the USSR has consistently been devoted to investment.

We estimate that 24% of the USSR gross national production went directly into capital investment in 1955 to increase the base for future industrial growth and expanded military capabilities. Only 18% of American gross national production is currently being used for capital investment, and this is the highest percentage we have achieved in the post-war period.

Of course, it is consoling to note that 18% for us amounts to a far greater absolute total than 24% for them. In their case, however, heavy industry has been the major beneficiary and is now absorbing about 50% of their total investment. Thus, industrial plant and equipment in the Soviet Union has nearly tripled since 1940, and their investments have been allocated predominantly to the coal, oil and electric power industries, to metalworking and metallurgical industries.

While capital goods output was rising over tenfold, agricultural production has barely kept pace with the growth of population.

Ambitious goals for heavy industry set in their five year plans are usually met or surpassed; unimpressive goals for consumer goods and agriculture have fared badly.

For the future, the principal economic task of the Soviet Union as expressed in the Sixth Five Year Plan, which covers 1956-1960, is "to overtake and surpass the most developed capitalist countries as regards per capita production."

This general objective has been spelled out by Saburov, Chief Soviet planner, as follows:

"It is true that we have not yet caught up to the United States either in the volume of production per capita, and so far in the volume of industrial production per capita." "However," he added, "the pace of our development, which by many times exceeds the pace of the growth of industry in the United States, permits us to overcome this lag within a very short historic period of time."

From the context, it is clear that Saburov was thinking in terms of fifteen to twenty years.

This, in simplest terms, is the industrial challenge of the USSR. Without going into the difficulties that the Soviet Union undoubtedly will meet in striving to build an industrial base more directly comparable to our own, we have to admit that Soviet industry is powerful and rapidly growing and that the political effects in the non-Communist world of Soviet industrial strength are bound to be far-reaching.



There is no doubt that in many countries, particularly among the countries of Asia which have obtained freedom over the past few decades, the rapid industrial progress of the Soviet Union has made a very deep impact. This impact has been increased as the Soviet Union has come forward with tempting offers in the field of military and industrial equipment and of technicians to help in its installation and use.

Before dealing with the Soviet program of economic penetration, it is worth considering why it is that their program in this field seems to have had such an initial impact. After all, over the last ten years, the U.S. has expended far more to aid the undeveloped areas of the world than the Soviet Union has given or even promised.

Here are some of the considerations upon which Soviet diplomacy has played with cunning effect.

At least until the events of the past few weeks, the "have-not" countries, -- many of them formerly colonial areas, -- have believed that the U.S. was so tied in with the colonial powers that it was not free to exercise an independent attitude.

The complexes resulting from the long period of colonial status, have caused many of these countries to react toward the U.S., in the classic way of self-assertion and opposition. The Soviets, until forced to show their hand in Hungary, have been very astute in their approach. They have managed to create in the countries of Asia and Africa the impression that they do not look upon these people as backward or underdeveloped, phrases too often used

by the West.

Hence, we have the strange situation where the most ruthless colonial power in the world -- the power that has dealt most cruelly with its own minorities -- is viewed as a liberator in areas where Soviet conduct and policies are little known.

The Soviet leaders have also been very flexible in their negotiations. They have promised liberally. They have not been tied down by legal restrictions which sometimes hamper our own ability to compete with the Soviets in many crisis areas. They have tailored their demands as to interest rates, terms of repayment and the like, to the capabilities of the receiving state.

The attitude of many of the Asian countries has also been influenced by the fact that they have suspected that the manufacturing interests in the Western world rather wished to discourage industrialization in Asia in order to keep them as good customers.

The general world trade pattern also looms large in the thinking of some of the Afro-Asian countries. For example, the United States as an exporter of rice is a competitor of countries like Burma and Thailand whose economy is based largely on their rice exports. At the same time, due largely to our increased use of synthetics, we have a diminishing interest in acquiring certain surplus raw materials, cotton and rubber, for example, from countries such as Egypt, Ceylon, and Indonesia. Thus, strange as it may seem, failures in the Soviet Bloc which have forced them to become a

purchaser of agricultural products have led the Soviet to adopt policies which have tended to improve their relations with countries in Asia and Africa. Agricultural deficits have thus become an asset.

Perhaps more impelling than any of these factors is the attitude of these countries toward the achievement of their economic revolution. Many of them thought that when their colonial status ceased, their economic advance would progress rapidly. It did not, and we have tended to remind them that progress must of necessity be slow, and requires the laying of sound foundations and the undertaking of long-term projects.

The countries in the Afro-Asian area, impatient for progress, have been profoundly impressed by developments in the Soviet Union. Thirty years or more ago the USSR was as backward industrially as they now are.

The Soviets claim their transformation in a generation into the world's second greatest power is the result of the Communist system. Through subtle and persistent propaganda, they have tended to make many people in these countries believe that such is true and that possibly, by cooperating with the Communist Bloc, they too, can somehow achieve a measure of growth similar to that which they see in the Soviet Union.

Communist China, they feel, is following the same course as the USSR; and many of these people believe that, within a limited space of time, Communist China, too, will achieve a comparable goal.

Finally, many of these countries believe that they can now have the best of both the free and the Communist Worlds, can play one off against the other, and that very likely the fact that they are the beneficiaries of Soviet aid will make the United States even more anxious to give them counter-balancing or even greater aid. Having in general adopted a neutralist role, they feel that they can best continue to maintain this if they accept both United States and USSR aid.

A cartoon in the NEW YORKER not so long ago, pointedly illustrates this particular problem. It showed the Chief of a cannibal tribe sitting in his hut with his council of war around him. The Cannibal Chief was saying:

"Now, here's the plan. We let word out that we're in a state of political ferment. Russia smells an opportunity and makes overtures. The West gets worried. They make overtures. Russia asks to send cultural ambassadors and we let them. The West asks for equal representation, and we invite them. Then, when we've got them all here, -- we eat them."

Few of the target countries of the Soviet economic drive are so naive as to fail to recognize the cons as well as the pros of becoming economically dependent on the Soviet Union. This is increasingly true as the Soviet repression of Hungary's freedom becomes known to these target countries. Moreover, actual performance, whether American or Russian, always involves frictions, frustration and a measure of disillusion. Surplus commodities taken from an undeveloped country in an initially attractive barter deal reappear as competing sales for that country's established

markets. Cement deliveries exceeding a country's storage facilities lie under the monsoon deluge and harden into worthlessness. Some customers, Communist China, for example, fail to get all they want from Russia.

I think we can safely say that on equal terms, Free-World products and economic assistance will be preferred to Soviet equivalents. But we must recognize that the Soviet's prices, terms and conditions are always adjustable so as to confront the underdeveloped country with an unequal proposition. And suspicious of Communism as many countries are, their urge for capital goods is such that they will remain sorely tempted to accept the cheapest proffers.

In addition to its strictly economic assets for playing up to these nations, the USSR has the advantage of possessing an enormous supply of obsolescent military equipment, which the smaller nations hunger for, as elements of prestige and power. These arms have only marginal or scrap value to the USSR, and they can be parcelled out on generous credit terms.

The USSR quickly found it had a valuable combination package to dispose of: cheap armaments, industrial equipment, exportable technical skills in the form of Soviet advisors available on request, a ready market for raw materials, subtle propaganda, and a total absence of political scruple. The fruits of all this we have been seeing in the recent troubles centering around the Suez Canal.

It may not be too much of an oversimplification to say that the eruption of the Middle East into a complex, dangerous crisis stems from a Soviet decision in April 1955 to buy its way into a power position in the area with diplomatic and economic support for the Arab states. During the summer of 1955, some eighteen months ago, the Czechs, fronting for the USSR, entered into serious negotiations with Egypt, offering economic aid in general and, of particular interest to the Arabs, the opportunity to acquire Soviet Bloc armaments.

The first Soviet arms deal with Egypt was finalized in September 1955. Similar deals on a smaller scale were made with Syria and Yemen, and offers were extended to Saudi Arabia, Jordan, Lebanon, the Sudan, and Libya. This was no casual commercial enterprise, but deliberate Soviet intervention in an area where a plentiful supply of arms was almost certain to inflame ancient animosities and simultaneously reduce the chances for the Western Powers to exercise restraint on the Arabs. It looked like a tidy little strategic investment for the USSR almost any way it worked out.

In fact, it worked out explosively. The USSR poured into Egypt, planes, tanks, guns, and all the items and equipment that go with them for over a year -- up to the value of about a quarter-billion dollars. Understandably, in view of this build-up and a series of Arab raids, Israel began to fear for its very existence, Britain and France for their economic life lines.

In this strained situation, it would have been possible for Soviet leaders to say to the Arabs, -- take the Suez Canal, the oil resources and pipe lines, and even Israel itself. It is easy to tell people to appropriate the property of third parties.

It is questionable whether the USSR in fact calculated on the dramatic developments which ensued. The Soviet reaction to the situation has been belligerent in words, cautious in action.

As events developed, the fighting ceased, and the USSR gained some undeserved credit with the Arabs for having stopped it. The USSR is almost certainly ready to re-supply Egyptian military stockpiles. It has given Egypt firm diplomatic support at every stage, and will undoubtedly band every effort, behind the scenes, to make a political shambles out of the U.N. negotiations looking toward real settlement of the Canal Zone issue and the Arab-Israeli conflict. It sees in the continued blocking of the Suez Canal a seriously disruptive factor for the Western Alliance.

At the same time, the USSR has shifted its attention to other states susceptible to Soviet influence, notably Syria. Here the government has moved toward a pro-Soviet position, lured by USSR offers of modern weapons and planes and Soviet instructors to teach the Syrians how to use them.

The situation is still explosive, and I will not venture to predict the outcome. Out of what has so far transpired, one conclusion is clear enough: with a minimum investment of Soviet economic resources, particularly military equipment, in an area already torn by rivalries and disputes

Moscow has reaped at least short-range strategic dividends. It is far easier to create chaos in an area than to stabilize it.

The USSR probably will continue to use these tactics to disrupt the Middle East -- and any other areas where it can find similar fuel to set fire. This is a challenge to American policy planning, and I would say, one of the most immediate threats arising out of the USSR's industrial strength.

There are some compensatory factors. As the Arab states today review the balance sheet of recent events, sober second thoughts are becoming evident, and there may come a reassessment of the net advantage or disadvantage of the entire operation.

What, after all, has been the result for the Arab world of following Soviet advice and of listening to its alluring promises?

Egypt has lost much of the Soviet arms for which it mortgaged its cotton and its relations with the West. It sacrificed for a time, at least, the revenue from the Canal. Senseless sabotage operations have caused consternation in other Arab countries. Egypt's economy has suffered severely; its leadership is questioned.

Oil revenues of Iraq, Saudi Arabia, Kuwait and Iran are declining due to the blocking of the Canal, the consequent tanker shortage, and the wanton destruction of pipe lines and pumping stations.

In fact, on any balance sheet you draw of the Arab world today, the flirtation with the Soviet Union has been a costly adventure both for those who indulged in it, and for the innocent bystanders.

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There would be far more reason to be disturbed about the long-range implications of the Soviet export of industrial assets and "know how" and their recent windfall profits in the Middle East, if it were not for the gravity of the crises which the Soviet Union is now facing both at home and in the satellite areas.

Industrialization and the building of a modern military establishment calls for a very high degree of sophistication. It requires education on a massive scale. While this can be scientific and technical in part, there is no feasible way of limiting the educational processes solely to the technical and scientific fields. It is true that at the present time the Soviets are putting relatively more emphasis on the scientific side than we. At the present time the percentage of Soviet graduates in these fields is roughly 60 percent of the total, whereas in the United States about 30 percent of the graduates are in scientific and 70 percent of our graduates are in other fields of education.

Some 18 months ago in an address at Columbia University, I did some speculating about the dilemma which the Soviet was then beginning to face as a result of the broadening of their education system, and I ventured to make this prediction: "In introducing mass education the troubled Soviet leaders have loosed forces dangerous to themselves. It will be very difficult for them henceforth to close off their own people from access to the realities of the outside world." These forces are now beginning to plague the Kremlin.

After all, even in the USSR a policy of rapid industrialization alone is not enough to satisfy human longings for a better life. This forced-draft industrial policy has partially succeeded in economic terms, but it has caused serious strains within Soviet society.

Under Stalin, many years of extreme emphasis on heavy industry had depressed living standards, and together with the dictatorial system of police terror needed to keep the people at the job, produced a lack of initiative among industrial workers, the peasants, the massive government bureaucracy, and the "intelligentsia."

Realizing that this situation was becoming serious enough to slow down further industrial growth, the Soviet leaders, after Stalin's death, began gradually to improve the people's living standards, and to moderate some of the harsher aspects of the dictatorship. While there has been some backing and filling as Malen'kov's attempt to meet the needs of the people for consumer goods gave way to a policy/renewed emphasis on heavy industry, by and large the old Stalinist policies have been somewhat relaxed at home, and Stalin's reputation thrown to the wolves.

Gradually, an industrial "intelligentsia" is being built up. To run the present Soviet industrial machine requires a vast army of highly trained technicians from factory foreman to plant manager. A certain measure of decentralization has been forced upon the Soviet system. As high production norms are set, the standards of work and accomplishment of the plant manager must be correspondingly raised.

Even though a highly materialistic society has been created, the reasoning, thinking processes of the workers at all levels have been stimulated. They are thinking not only of industrial production, but about the efficiency of the governmental machine itself and what it is doing to give them a better life.

There is growing up in Russia today, not only in industry but in all walks of life, a race of human beings who are becoming inquisitive about the fundamental principles that make it possible for men to live together in political societies. In particular, there are well substantiated reports that the students are becoming restive, inquisitive and outspoken in their demands for a critical examination of the infallibility of a system which produced the abuses of Stalinism.

Pride of country, desire for power, some measure of appreciation to the Soviet state, which has given them an education and a position of influence plus fear and uncertainty about the consequences of deviation, may, for a time continue to hold most of the Soviet intelligentsia in line. But the leaven of education has begun its work; the men in the Kremlin have a hard task ahead to hold this process in check.

Events in the satellites have vastly complicated the task.

It would be an oversimplification of the present struggle for liberty and freedom in Eastern Europe, and one that would not do justice to the cold courage of the Hungarians and the restrained determination of the Poles,

to ascribe recent events in these countries to mistaken headlong industrialization. The causes and motivations of the Polish and Hungarian developments go much deeper. They have chosen freedom, and the long struggle to achieve it has now only begun.

Nevertheless, the tough Stalinist program of forcing industrialization on Poland and Hungary -- a policy that was continued by Moscow's puppet leaders, Beirut and Rakosi, even after Stalin was buried and his acts repudiated by Moscow -- was one of the factors which led to the revolts.

Neither the overlords in Moscow, nor the puppet leaders in the satellites fully appreciated that a scale of industrialization which might be tolerable for a time in the USSR could not be imposed to the same degree in smaller and very differently constituted states.

Actually, the people in the satellites who were supposed to benefit did not. Instead, they suffered from tyranny and mismanagement. The satellite nations found in practice that the Soviet magic formula of forced industrialization simply was not a good model for small and relatively resource-poor states. Soviet pretensions to leadership of non-Communist nations seeking to industrialize, find no support in the miserable failure of the Soviet economic system throughout Eastern Europe.

After the event, even Moscow has admitted this.

An extraordinary editorial in PRAVDA of November 23, referred to serious miscalculations in Hungary, and "the building of large undertakings far beyond the strength of so small a country as Hungary." The writer went on to say that the slogan, "Increase the tempo of industrialization" which he claimed was quite correct under conditions prevailing in the USSR, was mechanically transferred to Hungary as a matter of routine, "without any due economic justification." "Large undertakings," the writer added, "were built without being assured of sufficient raw materials."

Characteristically, the editorial writer claimed that it was local stupidity in Hungary operating against Soviet advice that brought disaster. We are justified in questioning this after-thought. Certainly Rakosi in Hungary and Beirut in Poland thought that they were doing their bounden duty as prescribed by Moscow even after in Russia itself, the word had gone out to temper somewhat the Stalinist pattern of industrialization.

Gomulka, in his speech of October 22, in reviewing Poland's economic plight, put the issue in even stronger terms: "We contracted important investment credits for the expansion of industry, and when the time came for the payment of the first installment we found ourselves in the situation of an insolvent bankrupt."

Whatever else the situation in the Soviet satellites shows, it demonstrates beyond doubt that a policy of headlong pursuit of industrial strength is not enough to guarantee even economic welfare, let alone good

government and good life in general. I hope that this lesson may gradually sink into the minds of peoples in small nations outside the Soviet Bloc who are tempted to trade their political birthright for a mess of Soviet-style industrialization.

It is clear also that the Soviet leaders must now revise their views not only as to the value of the satellite military establishment, but also the value of the industrial contribution which they can expect to receive in the future, particularly from Poland and Hungary. At the same time, the Soviet Union will have the problem of making up agricultural shortages in these former surplus areas which now, due to overemphasis on industrialization, will have to look either East or West to supplement their deficit in food.

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The Soviet Union has made a fetish of industrial and military power. In doing so, as I have suggested, it has sacrificed the interest and welfare of many of its people, and it has dealt recklessly with the economies of the European satellites. In following this program, the USSR has failed to give either to their own people or to the people of the satellite states, their fair share of industrial production in the form of consumer goods, or the raising of the standards of living.

As justification for their actions, the Soviet have asserted that the development of heavy industry was necessary to their war machine and that in turn, this was required because the Soviet was threatened and encircled.

They have built up the war menace and invented the war mongers.

In accomplishing their primary objective of building a modern industrial state, they have, however, produced a new generation of highly technical, sophisticated and competently educated men and women. This new generation is making itself felt not only in the satellite areas where there is a historical hatred for the Russian oppressors. It is also beginning to be heard in the Soviet Union itself where youth is not prepared to accept the strictly materialistic and militaristic bases of Soviet society.

Hence, the challenge of Soviet industrial growth is not only directed outward to the Free World, it is also a challenge addressed inward to the peoples of the Soviet Bloc. It threatens the very basis of Communist doctrine and the type of government set up in the Kremlin.